CHERNUKHIN, S.Ya., kandidat tekhnicheskikh nauk.

Drainage of drying fields for block and milled peat. Trudy Inst. torf. AN BSSR 4:217-229 '55. (MLRA 9:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat)

CHERNUKHIN, S.Ya., kand.tekhn.nauk

Problems involved in winning peat litter by the milling method. Torf.prom. 37 no.4:19-21 '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat machinery)

VAGANOV, V.V., inzh.; CHERNUKHIN, S.Ya., kand.tekhn.nauk

Winning peat litter at the enterprises of the Leningrad Economic Council. Torf.prom. 38 no.2:27-31 '61. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatelskiy institut torfyanoy promyshlennosit.
(Leningrad Economic Region—Peat industry)

VAGANOV, V.V.; CHERNUKHIN, S.Ya., kand. tekhn. nauk

Using the milled peat method for the production of peat litter in the industrial and state- and collective-farm enterprises. Trudy VNIITP no.18:92-108 '61.
(MIRA 17:1)

CHERNUKHIN, S.Ya., kand. tekhn. nauk; VAGANOV, V.V., inzh.

Technological plan for the manufacture of peat litter. Torf. prom. 39 no.7:28-30 '62. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat)

MANDEL'BAUM, Aleksandr Iosifovich, inzh.; ZAKHAYAPIN, Boris Mikhaylovich, inzh.; MORGUNOV, Nikolay Ivanovich, kand. sel'khoz. nauk; CHERNUKHIN, Sholom Yakovlevich, kand. tekhn. nauk; CHUBAROV, N.D., red.; LARIONOV, G.Ye., tekhn. red.

[Industrial production of peat-mineral-ammonia fertilizers] Promyshlennoe proizvodstvo torfomineral'no-ammiachnykh udobrenii i torfianoi podstilki. [By] A.I.Mandel'baum i dr. Moskva, Gosenergoizdat, 1963. 231 p. (MIRA 17:1)
(Fertilizers and manures) (Peat)

CHERNUKHIN, V.

Hundreds of volunteer helpers. Sov.profsoiuzy 18 no.23:20-22 D '62. (MIRA 15:12)

1. Predsedatel' zavodskogo komiteta Yuzhno-Ural'skogo zavoda tyazhelogo mashinostroyeniya.
(Ural Mountain region--Medicine, Industrial)
(Ural Mountain region--Machinery industry)

CHERNUKHIN, V.A., inzh.

Investigating the flow of a fluid film caused by its interaction with a nonstabilized gas flow. Izv.vys.ucheb. zav.; mashinostr. no.8:149-155 '62. (MIRA 15:12)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni Baumana.

(Fluid dynamics)

L 57086-65 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1) Pd-1 UR/0145/65/000/004/0107/0112
ACCESSION NR: AP5012894 532.5

AUTHORS: Chernukhin, V. A. (Candidate of technical sciences)

TITLE: Experimental determination of fluid film thickness and amount of "drop-wise entrainment" occurring under the action of high speed gas flow

SOURCE: IVUZ. Mashinostroyeniye, no. 4, 1965, 107-112

TOPIC TAGS: fluid flow, fluid film, film thickness

ABSTRACT: The fluid film thickness and amount of "drop-wise entrainment" in the air stream of a fluid film subjected to high speed air flow were experimentally investigated. The apparatus consisted of a [illegible]-mm long, 50-mm wide polished steel plate (covered with another plate) with porous plug or slit water film supplies in the plate, a wind tunnel permitting variable air speeds of M = [illegible] and also M = 2.2, and normal water flow rate and air speed instrumentation. Film thickness was measured with a special electrical micrometer with error of 1 micron. Experiments were performed for water flow rates of [illegible] gm/cm.sec and air speeds of 50-300 m/sec. "Drop-wise entrainment" was measured by

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L 57086-65

ACCESSION NR: AP5012894

collecting the water in the film and subtracting it from the total flow. Entrainment was observed only at speeds above 100 m/sec, and complete film separation could not be obtained even with M = 2.2, the full range of water flow. It was found that the film thickness decreased from [illegible] micron at 70 m/sec (0.8 [illegible] gm/cm sec) to ~6 at 130 m/sec and then [illegible] maximum of [illegible] wave crests) at 250 m/sec (22 micron for [illegible]. This is of the magnitude smaller than during vertical wall [illegible] and is much [illegible] than calculated from the equation prop[illegible] Abrams [illegible] 198' NACA, 1952). Entrainment varied [illegible] of 70% at 300 m/sec. It is concluded that [illegible] ms made by [illegible] the proposed equation are invalid and should be evaluated. [illegible] 4 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 03Dec63 ENCL: 00 SUB CODE: ME

NO REF SOV: 003 OTHER: 001

Card 2/2

L 4379-66 EWT(m)/EWA(h)
ACCESSION NR: AP5020258 UR/0367/65/002/001/0092/0096 31/25

AUTHOR: D'yachenko, P. P.; Kuz'minov, B. D.; Smirnov, V. I.; Chernukhin, V. L.; Chubarov, S. I.

TITLE: Kinetic energies of fragments with various masses in the fission of U-235 by thermal and fast neutrons 19

SOURCE: Yadernaya fizika, v. 2, no. 1, 1965, 92-96

TOPIC TAGS: uranium, nuclear fission, fission product, fast neutron, thermal neutron

ABSTRACT: The kinetic energy distributions of fragments with various masses have been investigated in the fission of U^{235} by thermal neutrons and by neutrons of mean energy 720 kev, for the purpose of comparing the dependence of the total fragment kinetic energies on the fragment mass ratios at the two fissioning-neutron energies. The fission was produced in a layer of uranium enriched 90% in U^{235}, deposited on a thin organic film, and the fragment energy was measured with two surface-barrier silicon detectors. The detector signals were analyzed after amplification by a two-dimensional 128 x 128 channel pulse-height analyzer, which sorted the pulse heights and stored all the information obtained during the measurements.

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L 4379-66
ACCESSION NR: AP5020258

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The results show that the mean total kinetic energies of the fission fragments have the same value for thermal and fast neutron fission, amounting to 156 ± 2 Mev for fission into two fragments with approximately equal masses. This means that in bombardment of U^{235} by thermal neutrons and neutrons with an average energy of 720 keV, the kinetic energy of the symmetric-fission fragments is approximately 10 Mev lower than for fission by neutrons with energies above 7 Mev. "The authors thank A. I. Sergachev, A. B. Yekatov, V. F. Semenkov, A. N. Utyuzhnikov, A. N. Agfonov, and V. V. Kalyuzhnyy for help." Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 19Jan65 ENCL: 00 SUB CODE: NP

NR REF SOV: 003 OTHER: 004

Card 2/2

L 2552-66 EWT(d)/EED-2/EWP(1) IJP(c) BB/GG

ACCESSION NR: AP5021338 UR/0120/65/000/004/0094/0100
539.1.075

AUTHORS: Yekatov, A. B.; Ivchenko, V. Ye.; Natalin, L. A.; Neshkov, N. V.; Smirnov, V. I.; Chernukhin, V. L.

TITLE: Multidimensional analyzer with preliminary data processing and combined memory

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 94-100

TOPIC TAGS: computer, computer control, computer input device, computer memory, computer storage device, memory core, reactor, nuclear energy, neutron radiation, radiation measurement

ABSTRACT: The functional characteristics of a multidimensional analyzer are described. The analyzer was created for studying energy and angular distribution of slow neutrons; however, it may also be used for other multidimensional measurements with corresponding input devices. The storage unit of the device consists of a memory having ferrite cores and a magnetic tape 6.25 mm wide with four recording channels. The combination of integral and nonintegral memory units allows a flexible memory system both in terms of size and in terms of on-line control during

Card 1/3

L 2552-66

ACCESSION NR: AP5021338

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the conduct of an experiment. Preliminary automatic data processing includes the functions of collection, sorting, certain calculations, and translation for computer input or from printer and oscillograph output. Basic units of the hardware are: a) the input unit, b) core memory, c) magnetic tape memory, and d) the output and data processing unit. All units are built from semiconductor and magnetic elements. The basic core memory has a capacity of 2048 16-bit words and is provided with a speed monitor feature to give a slower recording rate at input loading. Block diagrams are included, showing the flow of information through the composite system during data collection, sorting, transformation, and continuous process control. Particular information on cycle times and recording speeds is given. For neutron tracking experiments, data pass through detection, signal amplification, phasing, and time conversion into machine code. The passage of information from each detector is parallel and independent. Specific information on measurement time interval limitations is given. Functional block diagrams of the input unit, high speed intermediate memory, and magnetic tape recording unit are shown and discussed. Data may be processed prior to output for obtaining the double differential section of neutrons. The formulae used in the calculations are given. The authors thank A. V. Andriashin, B. Ya.

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Card 2/3

L 2552-66
ACCESSION NR: AP5021338

Gerasimov, and N. Ye. Detinenko for assisting in the planning and design of the analyzer, and S. I. Chubarov for his interest and assistance. Orig. art. has: 3 figures and 2 formulas. [04]

ASSOCIATION: Fiziko-energeticheskiy institut GKAE, Obninsk (Physics and Power Engineering Institute, GKAE)

SUBMITTED: 11Jan65	ENCL: 00	SUB CODE: DP, NP
NO REF SOV: 005	OTHER: 000	ATD PRESS: 4109

Card 3/3

34779-66 EWT(m)

ACC NR: AR6017200 SOURCE CODE: UR/0058/65/000/012/A033/A033

AUTHOR: Andriashin, A. V.; Gerasimov, B. Ya.; Yekatov, A. B.; Ivchenko, V. Ye.; Meshkov, N. V.; Smirnov, V. I.; Chernukhin, V. L.

TITLE: Multidimensional analyzer with preliminary processing of the information and with combined-type memory

SOURCE: Ref. zh. Fizika, Abs. 12A317

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 147-159

TOPIC TAGS: multichannel analyzer, slow neutron, neutron spectrum, angular distribution, ferrite core memory, magnetic recording tape, computer component, NEUTRON ENERGY DISTRIBUTION

ABSTRACT: The authors describe a multidimensional analyzer, intended for the investigation of energy and angular distributions of slow neutrons. The recording unit of the analyzer consists of a ferrite-core memory and a magnetic-tape of 6.25 mm width with four-track recording. The combination of integrating and non-integrating memory devices makes it possible to construct a flexible memory system having large capacity as well as permitting the exercise of control over the course of the experiment, preliminary adjustments, preliminary processing of information, etc. The analyzer consists of the following fundamental units, constructed entirely of semiconductor and magnetic elements: a) input unit; b) ferrite-core memory; c) magnetic-tape memory; d) equalizing unit (intermediate ferrite memory); e) unit for insertion and processing

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L 34779-66

ACC NR: AR6017200

of data. Depending on the chosen operating conditions, the functional connection between the blocks is changed by means of switches. The analyzer is constructed in the form of four individual racks with individual power supplies and control panels. L. S. [Translation of abstract]

SUB CODE: 20, 09

Card 2/2

L 44366-66 EWT(m)/EWP(j)/EWP(k)/T/EWP(e)/EWP(t)/ETI IJP(c) RM/WH/WW/JD
ACC NR: AP6019736 (A) SOURCE CODE: UR/0063/66/011/003/0348/0350

AUTHOR: Nosnikov, A. F.; Borodushkina, Kh. N.; Boguslavskiy, D. B.; Chernukhina, A. F.; Khomutov, A. I.; Blokh, G. A.

ORG: Dnepropetrovsk Institute of Chemical Technology im. F. E. Dzerzhinskiy (Dnepropetrovskiy khimiko-tekhnologicheskiy institut); Dnepropetrovsk Tire Plant (Dnepropetrovskiy shinnyy zavod); VNII of Glass Fibers (VNII steklovolokna)

45
13

TITLE: Porous silicon fibers acting as carriers of gaseous vulcanizing agents and accelerators

SOURCE: Vses khim obshch. Zh, v. 11, no. 3, 1966, 348-350

TOPIC TAGS: vulcanization, rubber, silicon plastic

ABSTRACT: The effect of porous silicon fibers containing hydrogen sulfide, ammonia, and sulfur dioxide on the physicomechanical properties of tire rubbers was investigated. The pore diameters ranged from 2.8 Å to 75 Å. The vulcanization temperature was 143-163°C and the vulcanization duration was 10-80 minutes. The fiber contents in the rubber were as high as 10%. Up to 10 wt %, the incorporation of the silicon fibers affected neither the vulcanization process nor the mechanical properties of the tire rubbers. It was found that rubbers prepared using ammonia accelerator were qualitatively as good as those vulcanized with sulfur compounds and diphenylguanidine ac-

UDC: 666.86+675.5

Card 1/2

L 44366-66
ACC NR: AP6019736

celerator. In all cases, the tire rubbers vulcanized with ammonia exhibited excellent mechanical properties. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 11/ SUBM DATE: 16Jun65/ ORIG REF: 004

Card 2/2 hs

KHODOTOVA, Ye.L.; CHERNUKHINA, L.A.; SEREBRYANYY, S.B.; [illegible], F.I.

C-terminal residues of amino acids of fibrinogen and fibrin in cattle blood. Ukr. khim. zhur. 30 no.9:962-965 '64.
(MIRA 17:10)

1. Institut mikrobiologii AN UkrSSR i Institut biokhimii AN UkrSSR.

NEPLYUYEV, V.M.; CHERNUKHINA, L.A.; SEREBRYANYY, S.B.

Chromatographic separation of the 4-dimethylamino-3,5-dinitrophenylthiohydantoins of amino acids on paper. Biokhimiia 29 No. 1:51-52 Ja-F '64. (MIRA 18:12)

1. Institut organicheskoy khimii AN UkrSSR, Kiyev. Submitted March 16, 1963.

CHERNUKHINA, M. P.

"Tyrotoxic Encephalitis," Klin. Med., 26, No. 6, 1948

Psychiatric Clinic, Khabarovsk Med. Inst.

CHERNUKHINA, M. P.

Psychotic forms of tick encephalitis. Nevropat. psikhiat., Moskva 19 no.4:78-79 July-Aug. 1950. (CIML 20:1)

1. Of the Psychiatric Clinic (Director -- Prof. I. B. Galant), Khabarovsk Medical Institute, Khabarovsk.

CHERNUKHINA, M. P.

Chernukhina, M. P.

"The Use of Sleep to Treat Schizophrenia." Khabarovsk State Medical Inst. Chair of Psychiatry. Khabarovsk, 1954. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

GALANT, I.B.; CHERNUKHINA, M.P.; DENIS'YEVA, O.A.

Mental changes and psychoses in influenza in Khabarovsk during the period of the 1957 pandemic. Trudy Khab.med.inst. no.20:171-176 '60. (MIRA 15:10)

1. Iz kliniki psikhiatrii (zav. prof. I.B.Galant) Khabarovskogo meditsinskogo instituta.
(KHABAROVSK—INFLUENZA) (PSYCHOSES)

GALANT, I.B., prof.; CHERNUKHINA, M.P., kand.med.nauk; DENIS'YEVA, O.A.

Psychoses of influenzal etiology. Vrach. delo no.4:132-133 Ap '61. (MIRA 14:6)

1. Psikhiatricheskaya klinika (zav. - prof. I.B.Galant) Khabarovskogo meditsinskogo instituta.
(MENTAL ILLNESS) (INFLUENZA)

KHOLYAVENKO, K.M.; RUBANIK, M.Ya.; CHERNUKHINA, N.A.

Chemisorption method used for determining the surface area of silver deposited on a carrier. Kin. i kat. 5 no.3:505-512 My-Je '64. (MIRA 17:11)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR.

CHERNUKHINA, S.YE.

DRABKINA, F.M., inzhener; CHERNUKHINA, S.Ye., inzhener.

At the Batrak slope. Put' i put.khoz.no.8:38-40 Ag '57.
(MLRA 10:9)

(Railroads engineering) (Landslides)

SIROKO, I.A., mayor meditsinskoy sluzhby, kand. med. nauk; SHANTARENKO, I.V., podpolkovnik meditsinskoy sluzhby; MOROZOV, K.A., podpolkovnik meditsinskoy sluzhby; CHERNUKHINA, V.F., mayor meditsinskoy sluzhby; KODES, A.M.

Improvement in the method for the isolation and identification of dysentery bacteria. Voen.-med. zhur. no.5:61-64 My '60.
(MIRA 13:7)

(SHIGELLA PARADYSENTERIAE)

23486
S/152/61/000/005/001/002
B126/B219

53300 2209 only

AUTHORS: Paushkin, Ya. M., Vishnyakova, T. P., and Chernukhina, V. G.

TITLE: Catalytic reforming of naphthenic hydrocarbons to aromatic hydrocarbons from benzine fractions using a catalyst with 0.1 - 0.3% nickel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 5, 1961, 69 - 73

TEXT: For petrochemical synthesis the problem of aromatic hydrocarbons obtaining from crude oil is of current importance. The dehydrating effect of nickel catalysts has already been carefully examined by A. D. Zelinskiy and his school. Ciapetta (Ref. 2, Ciapetta F., Hanter I., Ind. Eng. Chem., 45, 147, 1953) showed that isomerization of normal pentane, hexane, heptane, and octane to isoparaffins is possible with a catalyst containing 5% of nickel on aluminum silicate and at 407°C, 25 atm pressure; (yield 55 - 65%). Kh. M. Minayev, N. I. Shuykin, L. M. Feofanova and Yu. P. Yegorov isomerized normal decane and hendecane with a catalyst containing 8% of nickel on aluminum oxide. The authors

Card 1/6

Catalytic reforming of...

of the present paper experimented with nickel catalysts containing 0.1 - 0.3% of nickel on aluminum oxide. The catalyst was prepared from the active form of aluminum oxide, obtained by calcining ordinary aluminum oxide at 700°C, whereupon the γ-form Al_2O_3 is achieved. The aluminum oxide obtained was soaked with a nickel nitrate solution of $Ni(NO_3)_2 \cdot 6H_2O$ in such quantities as to obtain the necessary concentration of metallic nickel on Al_2O_3 after evaporation. The best experimental results were obtained with catalysts containing 0.1 to 0.3% of nickel. They are given in Tables 3 and 4. A catalyst with 0.1 - 0.3% of Ni on Al_2O_3 works without any noticeable decrease in activity for 10 - 12 hr at a volume rate of 0.2 hr^{-1}, then the activity drops as a result of coking. Regeneration was effected by burning the coke at 400 - 500°C. In Table 5, a comparison between reforming by nickel and reforming by platinum is given. The experiments thus proved that a catalyst on a nickel basis only differs slightly in its activity from a catalyst on Pt-basis, but it is much cheaper. There are 5 tables and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Ciapetta F., Hanter I., Ind. Eng. Chem., 45, 147, 1953.

Card 2/6

23486
S/152/61/000/005/001/002
B126/B219

Catalytic reforming of...

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. I. M. Gubkina (Moscow Institute of Petrochemical and Gas Industry imeni Acad. I. M. Gubkin)

SUBMITTED: February 26, 1961

1) Показатели	2) Температура опыта, °С			3) 0,1 % Ni на Al_2O_3 при 550°
	450	500	550	
4) Плотность D_4^{20}	0,7360	0,751	0,768	0,782
5) Молекулярный вес	110,5	118	128	139
6) Бромное число	5,5	10,5	13	10,2
7) Групповой состав, % вес:				
8) ароматические углеводороды	6,1	13,3	21,5	31,1
9) нафтеновые	—	36,7	30	20,2
10) парафиновые	—	42,3	38	39,8
11) непредельные	3,9	7,7	10,5	8,9
12) Состав газа (% объемн.)				
13) водород	58	73	66,7	70—80
14) непредельные	3,3	7,5	8,8	—

Табл 3

Card 3/6

CHERNUKHO, V.L.

Active modification of the complement fixation reaction with the fresh blood of the patient for the diagnosis of scleroma. Zhur. ush. nos. i gorl. bol. 23 no.6:82-85 N-D '63.

(MIRA 17:5)

1. Iz kliniki bolezney ukha, gorla i nosa (zaveduyushchiy - prof. N.P. Kniga) Minskogo meditsinskogo instituta.

COUNTRY : USSR
CATEGORY : Cultivated Plants. M
Potatoes. Vegetables. Cucurbits.
ABS. JOUR. : RZhBiol., No. 3, 1959, No. 10970

AUTHOR : Chernukhov, A. M.
INST. : Voronezh Agricultural Institute
TITLE : The Irrigation Schedule and the Characteristics of the Irrigation Technique for Tomatoes Under the Conditions of Voronezh Oblast'.
ORIG. PUB. : Zap. Voronezhsk. s.-kh. in-ta, 1957, 27, No. 2, 121-128.

ABSTRACT : At the training farm of the Institute experiments were conducted in the study of the irrigation schedule for tomatoes on heavily clayey chernozem 0.9-1.1 meters in thickness. Under the conditions of Voronezh Oblast, the lack of uniformity in the distribution of precipitation makes it impossible to determine the periods of water applications according to the developmental stages of the plants. It is necessary to determine the irrigation schedule by means of observations on the soil moisture for which purpose the author has perfected the design

CARD: 1/2

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1 1959, No. 10970

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : of Shishkov's soil moisture gauge. The study of the water and physical properties of the soil showed that the minimum rates for surface irrigation along the furrows should not be below 500-600 cubic meters per 1 hectare in one application. The depth of the soaking which depends on the spread of the roots system, is 30 cm in June, 40-50 cm in July, and 60 cm in August. In the presence of air dryness, it is necessary to do sprinkling in order to avoid the drop of the flowers and fruit sets. — N. Ya. Gal'per

CARD: 2/2

CHERNULICH, A.

A-3

Category : USSR/General Problems - Problems of Teaching

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 2786

Author : Chernulich, A.
Title : Laboratory Work in Physics in the VI-VIII Classes of Secondary School, with Equipment Constructed by the Students.

Orig Pub : Sovetskaya shkola, 1956, No 3, 45-52

Abstract : No abstract

Card : 1/1

BREZHNEV, V.I.; CHERNUS, Yu.K.

The effect of deep underwater sewage disposal on the pollution of littoral waters in the area of the Sochi health resort. Gig. i san. 25 no. 12:95-96 D '60. (MIRA 14:2)

1. Iz upravleniya vodoprovodno-kanalizatsionnogo khozyaystva Ministerstva kommunal'nogo khozyaystva RSFSR i Sochinskoy sanitarno-epidemiologicheskoy stantsii.
(SOCHI—WATER—POLLUTION)

CHERNUS, Yu.K., vrach.

Sanitary conditions for disposing of sewage into the sea and the length of the area over which it spreads. Vod.i san.tekh. no.4:11-13 Ap '63 (MIRA 16:4)

(Sewage disposal)

CHERNUSHENKO, A.M.

USSR/ Electronics - Cathode ray tubes

Card 1/1 : Pub. 22 - 22/44

Authors : Stekol'nikov, I. S.; Inkov, A. Ya.; and Chernushenko, A. M.

Title : A new feeding system for a pulse oscillograph

Periodical : Dok. AN SSSR 98/6, 969-972, October 21, 1954

Abstract : A new method for feeding cathode ray tubes of various types is described. The method consists of applying overcharged (with respect to a normal voltage of a tube), a short, almost square wave type, negative pulses to the cathodes of the tubes. The method found a great application in the cathode ray tube industry for it helped to diminish the dimensions, weight, and cost of the tubes. Four Russian references (1944-1953). Diagrams.

Institution: Power Engineering (Energetic) Institute im. G. M. Krzhanovskiy of the Acad. of Scs. of the USSR

Presented by: Academician A. V. Vinter, May 12, 1954

CHERNUSHENKO, A. M.

Category : USSR/Radiophysics - Radio-wave reception

I-7

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1952

Author : Chernushenko, A.M.
Title : Oscillograph for Investigation of Superhigh Frequency Oscillations and Certain Results of its Use for the Study of Pulsed Magnetrons

Orig Pub : Radiotekhn. i elektronika, 1956, 1, No 3, 381-392

Abstract : Description of a cathode-ray tube and oscillograph intended for the observation of super-high frequency oscillations of pulsed magnetrons in the 10-cm band. The first experimental results obtained with this oscillograph are described.

Card : 1/1

CHERNUSHENKO, A. M.

В. Г. Дубенецкий,
А. Н. Кочин

Прямо показывающие приборы для [illegible] характеристик согласования.

А. Л. [illegible]

Некоторые технические применения фазометрических методов измерения неэлектрических величин.

В. В. Кандыба,
Е. А. Коновалов,
Г. П. Мосальков,
П. А. Иванов

Опыт разработки широкополосного [illegible]

Н. С. Степанов

Некоторые приборы для автоматизации производственных измерений элементов аппаратуры дальней связи

11 июня
(с 18 до 22 часов)

М. В. Фомин

Вопросы разработки комплекса СВЧ измерительной аппаратуры для радиорелейных линий.

А. М. Прохоров

Вопросы методики измерения и аппаратурного решения при измерении группового времени запаздывания на СВЧ в радиочастотах

В. М. Штейн,
В. И. Борисов,
Д. А. Подберезин

Использование импульсной модуляции для измерения временных характеристик

А. М. Черушенко

Установка для исследования высокочастотных транзисторов и замедляющих систем наносекундными импульсами

Н. Н. Бобин,
В. Я. Лисовой

Прибор для визуального наблюдения модуля коэффициента передачи четырехполюсников в диапазоне частот

8. СЕКЦИЯ ОБЩЕЙ РАДИОТЕХНИКИ

Руководитель Г. А. Левин

9 июня
(с 10 до 12 часов)

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow, 8-12 June. 1959

AUTHOR: Chernushenko, A.M. SOV/109-4-6-12/27

TITLE: Application of Delay Systems to the Deflection of the Electron Beam in Oscillographic Tubes (Primeneniye zamedlyayushchikh sistem dlya otkloneniya elektronnogo puchka v ostsillograficheskikh trubkakh)

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 6, pp 995 - 1001 (USSR)

ABSTRACT: First, the problem is considered analytically. It is assumed that the dynamic sensitivity A_ω of the deflection system is given by:

$$A_\omega = A'_\omega \left\{ \sin \omega\, nh \frac{1 - \frac{v}{v_o}}{2v} \operatorname{cosec} \omega h \frac{1 - \frac{v}{v_o}}{2v} \sin \omega \left[x - x \left[t + \frac{h(n-1)\left(1 - \frac{v}{v_o}\right)}{2v} + \frac{\tau}{2} \right] + \sigma \sin \omega nh \frac{1 + \frac{v}{v_o}}{2v} \right. \right. \quad (1)$$

$$\left. \left. x \operatorname{cosec} \omega h \frac{1 + \frac{v}{v_o}}{2v} \sin \left\{ \omega \left[t - \frac{2nh}{v} + \frac{h(n-1)\left(1 + \frac{v}{v_o}\right)}{2v} + \frac{\tau}{2} \right] + \varphi \right\} \right\}$$

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where A'_ω is the dynamic sensitivity of a single deflection element, $A_o = kU_m h/2dU_o$ is the static sensitivity of one deflection element, ω is the angular frequency, n is the number of the deflection elements, v is the phase velocity of a wave propagating along the system, σ is the modulus of the reflection coefficient, φ is the phase of the reflection coefficient, U_m is the amplitude of the deflection voltage, v_o is the velocity of the beam in the deflection region, h is the period of the system, d is the distance between the deflection surfaces, U_o is the accelerating voltage which determines the velocity of the beam in the accelerating region and k is the field form factor. Eq (1) is used to plot some curves; these are shown in Figures 1 and 2. Figure 1 illustrates the dependence of the dynamic sensitivity of the deflection system on the

Application of Delay Systems to the Deflection of the Electron Beam in Oscillographic Tubes

mismatch of the beam and wave velocities. Figure 2 shows the dynamic sensitivity of the deflection system as a function of frequency for various values of the reflection coefficient. The experimental investigation was carried out on two tubes. The deflection of one of the tubes was in the form of a tape line situated inside a rectangular screen (Figure 3). The electrical characteristics of this system were: wave impedance of 60Ω, delay factor of 5, standing wave ratio of 1.7 over the frequencies ranging from 0 - 15 000 Mc/s. The second tube had the delay system of a "helix-in-a-waveguide" type (Figure 4). The system had the following parameters: wave impedance of 100 Ω, delay of 5, standing wave ratio of less than 2 over the frequencies of 0 - 10 000 Mc/s. The electron gun of the tubes had an electrostatic focusing. From the experiments it was found that the tube with a helical deflection system had a bandwidth extending from 0 - 10 000 Mc/s (see Curve B in Figure 6); the dynamic

Application of Delay Systems to the Deflection of the Electron Beam in Oscillographic Tubes

sensitivity of the tube was 2.2 lines per 1 V. The tube with the tape-line deflection system had a bandwidth of 15 000 Mc/s (see Curve A in Figure 6). The dynamic sensitivity of this tube was 1.25 lines per 1 V; the power required to deflect the beam by the width of one line was 11 mW. The oscillograms taken by means of the tubes are shown in Figures 7 and 8. Figure 7 shows a video pulse whose rise time was 2 mμsec; Figure 8 illustrates the front of the pulse of a magnetron operating at 10 000 Mc/s. The author expresses his gratitude to R.L. Golub for carrying out the technological work in the construction of the tubes. There are 8 figures and 7 references, 4 of which are English and 3 Soviet.

SUBMITTED: April 16, 1957
After revision - July 11, 1958

Chernushenko, F.

CHERNUSHENKO,F.

Rhytmical work in enterprises is the important conditon for increasing labor productivity. Avt.transp.33 no.8:10-11 Ag'55. (MLRA 8:12)

1. Glavnyy inzhener 1-go Kiyevskogo avtoremontnogo zavoda
(Automobiles--Repairing)

CHERNUSHENKO, Ye. F., Cand Med Sci -- (diss) "Course of immunobiological reactions in tuberculosis under conditions of stimulation of the central nervous system (experimental study)." Kiev, 1957. 11 pp (Min of Health Ukr SSR, Kiev Order of Labor Red Banner Med Inst im Academician A. A. Bogomolets), 200 copies (KL, 1-58, 122)

CHERNUSHENKO, Ye.F., nauchnyy sotrudnik

Streptomycin therapy following experimental BCG vaccination and its influence on the development of immunity. Pat., klin. i terap.tub. no.8:16-19 '58. (MIRA 13:7)

1. Iz mikrobiologicheskoy laboratorii (rukovoditel' - prof. R.O. Drabkina) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(STREPTOMYCIN) (BCG VACCINATION) (IMMUNITY)

CHERNUSHENKO, Ye.F., nauchnyy sotrudnik

Streptomycin therapy in experimental primary minimal tuberculosis infection and its influence on the formation of immunity. Pat., klin.i terap.tub. no.8:20-24 '58. (MIRA 13:7)

1. Iz mikrobiologicheskoy laboratorii (rukovoditel' - prof. R.O. Drabkina) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(STREPTOMYCIN) (TUBERCULOSIS) (IMMUNITY)

IZABOLINSKAYA, R.M., kand.med.nauk.; VEL'TMAN, R.P., nauchnyy sotrudnik; CHERNUSHENKO, Ye.F., nauchnyy sotrudnik

Changes in the blood protein fractions in guinea pigs under the influence of vaccination and infection with tuberculosis. Pat., klin.,i terap. tub. no.8:79-82 '58. (MIRA 13:7)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(BLOOD PROTEINS) (BCG VACCINATION) (TUBERCULOSIS)

CHERNUSHENKO, Ya.F., nauchnyy sotrudnik

Change in immunologic reactions in patients with pulmonary tuberculosis following surgery. Pat.,klin.i terap.tub. no.8: 339-343 '58. (MIRA 13:7)

1. Iz mikrobiologicheskoy laboratorii (rukovoditel' - prof. R.O. Drabkina) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(TUBERCULOSIS) (LUNGS--SURGERY)

CHERNUSHENKO, Ye.F., kand.med.nauk

Effect of phthivazide on the development of immunity in BCG vaccination in experiment. Probl.tub. 37 no.7:81-84 '59. (MIRA 13:4)

1. Iz mikrobiologicheskoy laboratorii (zav. - prof. R.O. Drabkina) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza imeni akad. F.G. Yanovskogo (direktor - kand.med.nauk A.S. Mamolat).
(BCG VACCINATION exper.)
(ISONIAZID related cpds.)

DRABKINA, R.O., prof.; CHERNUSHENKO, Ye.F., kand.med.nauk

Effect of antituberculotic drugs on the immunological reactivity of the body. Vrach. delo no. 3:7-11 Mr '61. (MIRA 14:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza imeni akademika F.G. Yanovskogo.
(TUBERCULOSIS) (IMMUNOLOGY)

DRABKINA, R.C., prof.; CHERNUSHENKO, Ye.F., kand.med.nauk

Changes in immunobiological reactions of the body under the influence of streptomycin; experimental study. Probl. tub. 42 no.11:46-51 '64. (MIRA 18:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza i grudnoy khirurgii imeni akademika F.G.Yanovskogo (direktor - dotsent A.E.Mamolat), Kiyev.

DRABKINA, R.O., prof.; CHERNUSHENKO, Ye.F., kand.med.nauk

Effect of para-aminosalicylic acid (PAS) on the reactivity of the body under experimental conditions. Probl.tub. 39 no.1: 76-82 '61. (MIRA 14:1)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - dotsent A.S. Mamolat).
(SALICYLIC ACID)

GOFNER, A.M., kand.tekhn. nauk; CHERNUSHENKO, Ye.T., inzh.

Powder metal wire for semiautomatic welding in assembly operations. Svar. proizv. no.8:5-7 Ag '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu Ministerstva stroitel'stva RSFSR.
(Metal powder products) (Electric welding)

USSR / General and Special Zoology. Insects, Insect and Mite Pests. P

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54413.

Author : Chernushev, P. K.
Inst : Stavropol' Sci. Res. Inst. of Agriculture.
Title : The Oak Prominent (Phalera bucephaloides) and Methods for Its Control (Lepidoptera, Notodontidae).

Orig Pub: Byul. nauchno-tekhn. inform. Stavropol. n.-i. in-ta s. kh., 1956, 1-2, 23-25.

Abstract: Phalera bucephaloides is the chief destructive pest of the oak in the forest belts of the Stavropol' Scientific Research Institute of Agriculture. The moths appear in the middle of May and lay eggs (in groups of 5-100) on the bottom side of the newly opened leaves. The caterpillars first skeletonize the bottom side of the leaves, and then eat around

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CHERNUSHKVICH, E.I.

Typhoid fever carrier state with localization in a pyelo-nephrotic kidney. Urologiia 28 no.5:49-50 S-O'63
(MIRA 17:4)

1. Iz urologicheskoy kliniki (zav. -- prof. A.I. Mikhel'son) Belorusskogo instituta usovershenstvovaniya vrachey.

CHERNUSHEVICH, E.I.

Priapism as a complication of the leukemic form of chronic myeloid leukemia. Urologiia no.6:58-59 '64.

(MIRA 18:11)

1. Urologicheskaya klinika (zav. - prof. A.I.Mikhel'son) Belorusskogo instituta usovershenstvovaniya vrachey na base Minskoy oblastnoy klinicheskoy bol'nitsy.

89515

5-3630

S/079/61/031/002/008/019
B118/B208

AUTHORS: Petrov, K. A., Neymysheva, A. A., Fomenko, M. G., Chernushevich, L. M., and Kuntsevich, A. D.

TITLE: Reaction of N-chloroimides of carboxylic acids with trialkyl-, halogen-, and cyano phosphites

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 2, 1961, 516-522

TEXT: The authors studied the reaction of N-chloroimides of esters of acetic and carboxylic acids with trialkyl-, halogen-, and cyano phosphites. Contrary to the vigorously reacting sulfene chlorides, chloroamines, and alkyl hypochlorites, the reaction of N-chloroethyl acetimide with triethyl phosphite proceeds smoothly and with little heat evolution. Separation of ethyl chloride occurs only on prolonged heating at 60-70°C. This reaction probably takes place in two stages:

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Reaction of N-chloroimides ...

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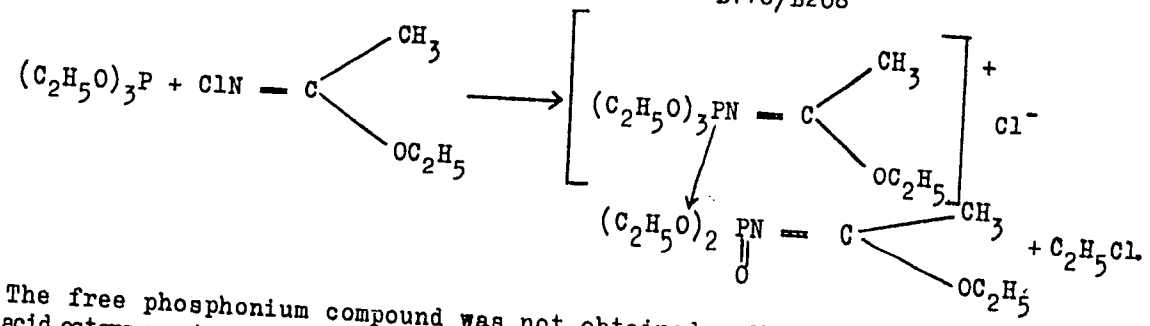

The free phosphonium compound was not obtained.. Chloroimides of carboxylic acid esters react more vigorously with phosphites; main products are the esters of dialkoxy-methylenamide of phosphoric acid. The chloroamides react with dialkyl chloro and dialkyl fluoro phosphites, alkyl dichloro and alkyl difluoro phosphites in a similar manner, giving the corresponding halogen amidophosphates in yields of between 27.5 and 70.5%

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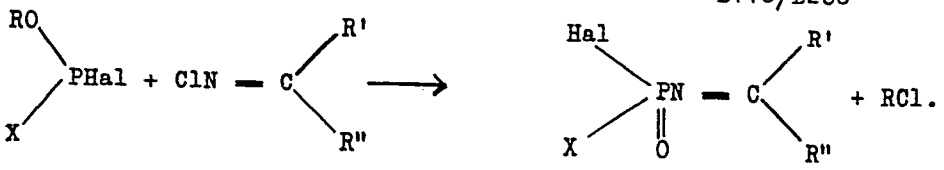
Reaction of N-chloroimides ...



Dialkyl fluoro phosphites give with chloroimides rather stable phosphonium compounds. Prolonged heating of the phosphonium compounds reduces the yield of fluoro phosphates; the reaction mixture was, therefore, distilled in vacuum after heating for 1-2 hr at 40-50°C. The fluoro amidophosphates are thermostable and are slowly hydrolyzed with water. When treating difluoro amidophosphates with aqueous alkali lyes at low temperatures, only one fluorine atom is hydrolyzed. On the action of a calculated quantity of sodium alcoholate in the solvent, only one fluorine atom is substituted by the alkoxy radical. Chloro amidophosphates are not thermostable, contrary to fluoro amidophosphates, distill only in high vacuum, and are easily hydrolyzable even at room temperature. When treating chloro amidophosphates with potassium cyanate in water at 5°C, the cyano group is substituted for chlorine, in addition to hydrolysis; in this way, the ethyl ester of

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Reaction of N-chloroimides ...

diethoxy-methylenamide of cyano phosphoric acid results in a 20% yield. By reacting chloroimides with cyano phosphites, cyano amidophosphates are obtained according to Arbuzov's rearrangement (Ref. 2) in yields between 30 and 50%. Dialkoxy-methylenamides of dicyano phosphoric acid are unstable and decompose with separation of gaseous products. There are 1 table and 4 references: 2 Soviet-bloc.

SUBMITTED: February 15, 1960

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CHERNUSHEVICH, M.D.

MOGILEVSKAYA, O.K.; CHERNUSHEVICH, M.D.

Structural changes in the cerebral cortex following experimental disturbance of the visual and auditory functions in dogs of various ages. Trudy Inst. fiziol. AN BSSR 1:238-249 '56 (MLRA 10:5)

1. Laboratoruya morfologii.
(BRAIN--LOCALIZATION OF FUNCTIONS) (SIGHT) (HEARING)

NESMEYANOVA, G.M., CHERNUSHEVICH, N.K.

Behavior of minerals associated with uranium in the process of the acid leaching of ores. Atom. energ. 9 no.2:137-138 Ag '60. (MIRA 13:8)

(Uranium ores)

VASIN, F.I.Prinimal uchastiye ANDREYEV, F.I.; CHERNUSHEVICH, V.A., inzh., retsenzent

[Characteristics of the accounting,calculation, and analysis of the cost of casting] Osobennosti ucheta, kal'kulirovaniia i analiza sebestoimosti otlivok. Moskva, Izd-vo "Mashinostroenie," 1964. 90 p. (MIRA 17:7)

CHERNUSHEVICH, V. A.

"Designing Hot Prolessing Shops," Avto. i Trak. Prom., No 2, 1948.
Ch. Metallurgist, Peoples' Commissariat Tank Ind. 1943
Stalin Prize (3rd), 1942.

FIL', Ye.V.; CHERNUSHEVICH, V.A., inzhener, retsenzent; SILAYEV, A.F., kandidat tekhnicheskikh nauk, redaktor; POPOLOV, Ya.N., redaktor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor.

[Organization of foundries] Organizatsiia litenykh tsekhov. Moskva, Gos. nauchno-tekn.izd-vo mashinostroitel'noi lit-ry, 1955. 207 p. (Foundries) (MLRA 9:4)

ROMANOVSKIY, N.T., inzhener; CHERNUSHEVICH, V.A., inzhener.

New Chevrolet foundry in Tonawanda, U.S.A. Lit. proizv. no.8:8-14 Ag '56. (MLRA 9:10)

(United States--Automobiles--Engines)
(Founding)

BLIZNYANSKIY, A.S., inzhener; CHERNUSHEVICH, V.A., inzhener.

"Handbook on materials for locomotive and railroad-car construction. D.A. Veis and others. Reviewed by A.S. Bliznianskii, V.A. Chernushevich. Vest.mash. 36 no.10:85-88 O '56. (MLRA 9:11)

1. Zamestitel' predsedatelya Tekhnicheskogo soveta Ministerstva transportnogo mashinostroyeniya (for Chernushevich)
(Railroads--Rolling stock--Handbooks, manuals, etc.)
(Veis, D.A.)

ALEKSEYEV, S.A.; ZHMAKIN, D.F.; KEREKESH, V.V.; MALOV, A.N.; MARTSINOVSKIY, P.L.; MOLOTOK, A.V.; NESMELOV, V.A.; TEVEROVSKIY, P.A.; KHISIN, R.I.; DELITSIN, A.A., retsenzent; SOKHNOVSKIY, M.A., retsenzent; STEFANOV, V.P., retsenzent; STOROZHEV, M.V., retsenzent; TALANOV, P.I., retsenzent; FAL'KEVICH, A.S., retsenzent; CHERNUSHEVICH, V.A., retsenzent; KHISIN, R.I., red.; GAL'TSOV, A.D., red.; VOL'SKIY, V.S., red.; STRUZHESTRAKH, Ye.I., red.; SEMENOVA, M.M., red. izd-va; MODEL', B.I., tekhn. red.

[Manual for the establishment of norms in the machinery industry in 4 volumes] Spravochnik normirovshchika-mashinostroitelia v 4 tomakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. litry. Vol.3. [Establishing norms for founding, stamping, welding, painting, metal plating, and woodwork] Normirovanie liteinykh, kuznechnykh, shtampovochnykh, svarochnykh, lakokrasochnykh rabot, metallopokrytii i derevoobrabotki. 1962. 671 p. (MIRA 15:4)

(Machinery industry—Production standards)

AUTHOR: Chernushkin, I. T. SOV/72-58-9-12/20

TITLE: Low-Viscosity Glazes on the Basis of Volcanic Ashes (Legkoplavkaya glazur' na osnove vulkanicheskogo pepla)

PERIODICAL: Steklo i keramika, 1958, Nr 9, pp 35 - 37 (USSR)

ABSTRACT: I.M.Gotlib and R.K.Kordonskaya (Ref 1) made an attempt to find low-viscosity glazes, they were, however, not successful. This paper presents an account of the development of a low-viscosity glaze for sewer pipes, tiles and bricks which can be baked at a temperature of 1000-1050°. The basic raw material used was volcanic ash from the site Nal'chik . The alkali content was reduced to a minimum and was partly replaced by zinc oxide, which is contained in the dross from the plant "Elektrotsink". Besides, clay from the site Ordzhonikidze was added. From table 1 the chemical composition of the raw materials can be seen. 14 samples with a content of volcanic ash varying from 20-75%, of dross varying from 20-70% and of clay varying from 5-10% were tested with the purpose of determining the optimum glaze composition. The glazes prepared had a density of 34-36 Bé, they were

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Ordzhonikidze Ceramics Plant

applied by dipping methods and were baked at temperatures from 1100-1200°. Besides, calcinated soda, technical zinc oxide, chalk and pyrolysite were added. The composition of 12 samples is presented in table 2. Next the preparation of the samples is described. They were baked in the electric furnace of the laboratory at 950-980°. The examination of the baked samples showed that those having a dross content exceeding 15 parts by weight exhibited flaws. The best results were obtained with the samples IX and X, which were tested under normal operational conditions in the Ordzhonikidze Ceramics Works. Sewer pipes, tiles and bricks which were glazed with this mixture and which were baked at 1000 to 1050° furnished good results. They complied with the specifications GOST 286-54 for chemical stability. The molecular composition of this glaze is also given. The application of this glaze permits to use local resources of low-viscosity clays in the production of sewer pipes and to reduce their production costs. There are 2 tables and 1 reference, 1 of which is Soviet.

SOV/110-58-11-12/28

AUTHORS: Zhuravskiy, N.K. (Engineer), and Chernushkin, I.T. (Engineer).

TITLE: Electrical Porcelain Based on Volcanic Ash. (Elektrotekhnicheskiy farfor na osnove vulkanicheskogo pepla).

PERIODICAL: Vestnik Elektropromyshlennosti, Nr.11, 1958, pp.42-43, (USSR)

ABSTRACT: It is becoming necessary to find new sources of raw material for the manufacture of electrical porcelain. Experiments have, therefore, been carried out at the Electrical Porcelain Works to make high-voltage electrical porcelain from Nal'chik volcanic ash and Manaas' quartz sand. Chemical analyses of these materials are recorded in Table 1. The formulation adopted for the porcelain is given. The micro-structure of the finished material is described; it has a substantial vitreous phase. Sixteen samples were made up as shown in Table 2, to determine the best composition for the porcelain. The procedures adopted for preparing the mixes, moulding the specimens, and firing them are described. The final firing temperature was 1290-1300°C. The properties of the

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Electrical Porcelain Based on Volcanic Ash.

three best samples, noted in Table 3, are evidently equal to those of the customary products. It was decided to adopt the wet method of shaping the parts. Insulators were made by pressing. It will be seen that the raw material resources of the industry have been extended and that the firing temperature can be made somewhat lower than hitherto. There are 3 tables.

SUBMITTED: May 7, 1958.

1. Insulation (Electrical)--Physical properties 2. Insulation (Electrical) --Test methods 3. Volcanic dust--Applications

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15(2)

SOV/72-59-11-11/13

AUTHORS: Zhuravskiy, N. K., Chernushkin, I. T., Kapel'ko, A. N.

TITLE: The Use of Volcanic Ash in the Pastes of Electrotechnical Porcelain

PERIODICAL: Steklo i keramika, 1959, Nr 11, pp 38-41 (USSR)

ABSTRACT: M. A. Bezborodov, P. F. Mikhalevich, S. G. Tumanov, V. P. Shvayko, G. N. Voronkov, A. A. Zvyagil'skiy, N. F. Kretova carried out experiments aiming at the production of porcelain free from feldspar. The possibility of using volcanic ash was investigated by the GIKI. In the years 1957-58, such experiments were carried out at the Ordzhonikidze Glass Container and Insulator Plant with Nal'chik volcanic ash and Manasskoye quartz sand. Table 1 gives the chemical compositions of the volcanic ash and quartz sand. Samples with volcanic-ash contents between 25 and 50% were produced. Their compositions are given in table 2, and their average mechanical, thermal, and dielectric values in table 3. Furthermore, the preparation of the porcelain paste is described in detail. It was prepared by means of the vacuum press of type SM-241 and the vacuum grinding machine VP-220. The baking of insulators was carried out in the oil-fired miniature tunnel kiln

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of the GIEKI system. The figure shows the temperature- and gas conditions of the baking process. The composition of the glazing is given in table 4. The average values of the properties of the insulators obtained, which are considered favorable, are listed in table 5. In conclusion, the authors state that volcanic ash constitutes a strong flux, and simplifies, as well as renders more economical, the technological process of porcelain preparation. The baking temperature for insulators can also be lowered by 50-60°, which extends the life of the tunnel kiln. There are 1 figure and 5 tables.

S/110/60/000/008/001/008
E194/E455

AUTHORS: Van-Gaut, Yu.N. and Chernushkin, V.Z., Engineers

TITLE: The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

PERIODICAL: Vestnik elektropromyshlennosti, 1960, No.8, pp.9-12

TEXT: This article describes a.c. electric strength tests on various grades of sheet polyvinyl chloride and polyethylene insulation, and also on high-voltage automobile cables with these types of insulation, over the temperature range 20 to 120°C. The samples were made in the Scientific Research Institute of the Cable Industry, who requested the tests. The tests were made on experimental automobile high-voltage ignition cables with insulation of plastic grade R230, polyethylene grade OKhK-510 and English polyethylene grade Alkathene D-2. In all cases the cable cores were 19 x 0.26 mm (1.3 mm diameter), the nominal external diameter of the cables over the insulation being 3, 5 and 7 mm. Cable samples 3 to 5 m long were placed in a heated steel bath filled with a semi-conducting mixture of transformer oil with 10 to 20% dibutylphthalate. The test electrode consisted of a lead tube of the same nominal internal diameter as the outside diameter

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The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

of the cable. The ends of the lead tube were flared out to bell-shaped ends and the cylindrical part was protected by an external brass tube, as sketched in Fig.1. After a breakdown test had been made at one place the electrode could be slipped along the cable to make a further test. The sheet materials tested were polyvinyl chloride grades R230, R489 and R2566, Polyethylene grade OKhK-501, low-pressure polyethylene grade ND and Alkathene D-2 in samples of 120 x 140 mm, 1 to 3 mm thick. The tests were made between flat polished electrodes 25 mm diameter with rounded edges, one electrode being spring-loaded to 100 g/cm^2. The electrode assembly with sample, contained in a bakelite cylinder, was placed in the heated bath and one electrode was earthed. In all the tests the voltage was raised to breakdown in 30 to 60 sec; the number of breakdown tests on each material of given thickness or type of wire was from 10 to 30 at each given temperature. Electric strength test results on automobile cable with polyvinyl chloride insulation are plotted in

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E194/E455

The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

Fig.2 and the breakdown voltages for samples with external diameters of 3 mm, 5 mm and 7 mm are 18, 32 and 40 kV respectively. The breakdown voltage does not drop by more than 15% over the range 20 to 90°C but thereafter commences to drop sharply, and at 120°C the corresponding values are 16, 23 and 28 kV. The polyvinyl chloride insulation commences to soften at a temperature of 90°C. An electric strength curve for all three wires is given in Fig.3 and it will be seen that up to 90°C the electric strength is slightly more than 40 kV/mm and then falls off. Test results for cable with polyethylene insulation of grade OKhK-501 are plotted in Fig.4. The electric strength ranges from 63 to 69 kV/mm at 20°C and is fairly constant to 70°C. It drops to 47 to 59 kV/mm at 90°C, at which temperature the material softens. Very similar results were obtained with Alkathene grade D-2, as indicated by the graph of Fig.5. The electric strength is 63 to 70 kV/mm at 20°C and falls to 51 to 56 kV/mm at 90°C; again the material softens at 70°C. Test results for sheets of polyvinyl chloride grades P230, P489 and P2566 are plotted in

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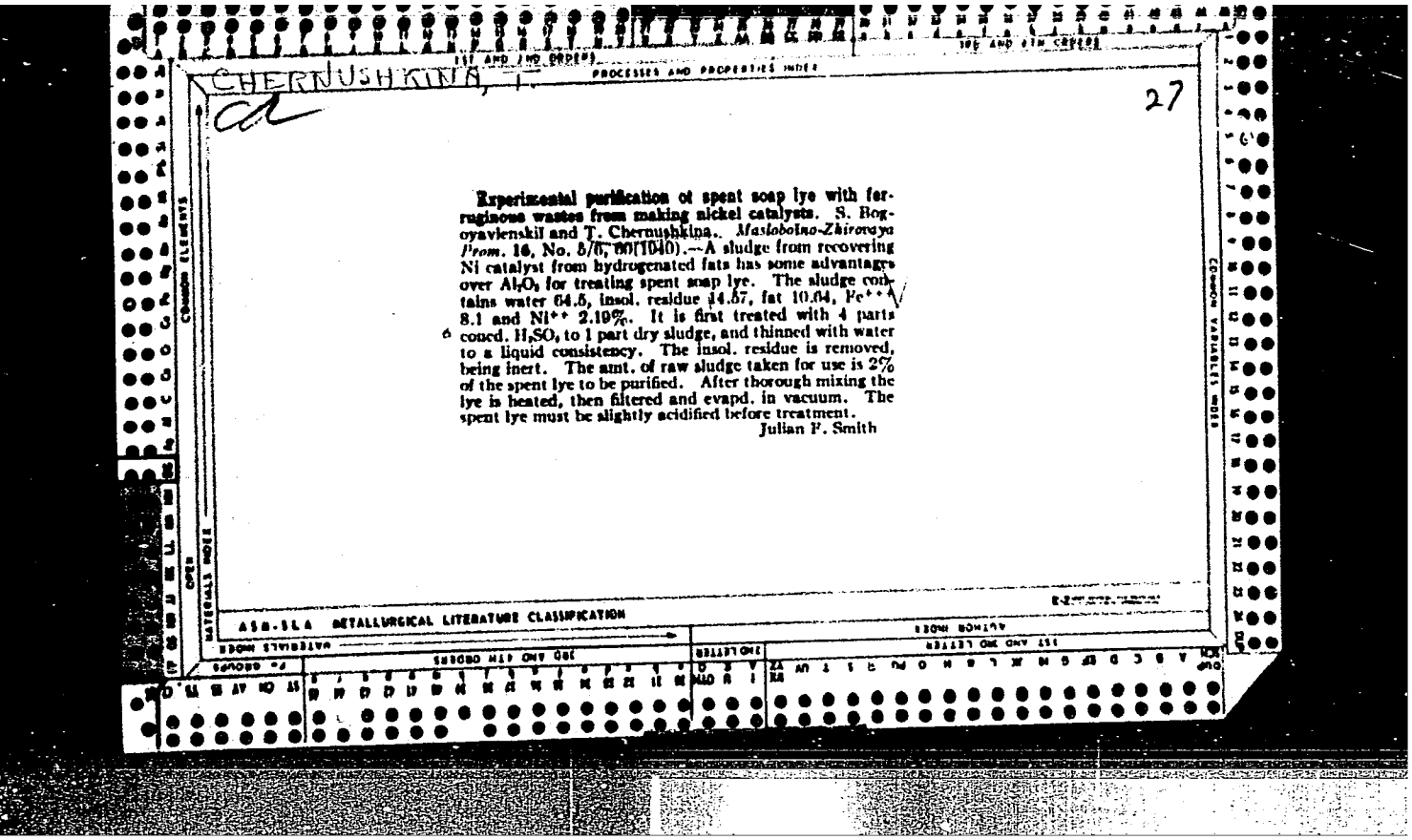
The Temperature-Dependence of the Electric Strength of Polyvinyl Chloride and Polyethylene Insulation

Fig.6, 7 and 8. The behaviour was similar to that of the cable. The least sensitive to temperature are grades R-230 and R-2566, whose electric strength is 34 to 47 kV/mm at 20°C and 23 to 29 kV/mm at 120°C. Polyethylene sheets behaved in much the same way as polyethylene cable; the test results are given in Fig.9. The low-pressure polyethylene grade ND had the highest electric strength, ranging from 93 kV/mm at 20°C to 63 kV/mm at 90°C. All the grades of polyethylene softened appreciably above 70°C. There are 9 figures.

SUBMITTED: June 19, 1959

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610012-0"



CHERNUSHKINA, T.

27

Experimental purification of spent soap lye with ferruginous wastes from making nickel catalysts. S. Bogoyavlenskii and T. Chernushkina. *Maslobolno-Zhirovaya Prom.* 16, No. 5/6, 20(1940).—A sludge from recovering Ni catalyst from hydrogenated fats has some advantages over Al_2O_3 for treating spent soap lye. The sludge contains water 64.5, insol. residue 14.57, fat 10.64, Fe^{++} 8.1 and Ni^{++} 2.19%. It is first treated with 4 parts concd. H_2SO_4 to 1 part dry sludge, and thinned with water to a liquid consistency. The insol. residue is removed, being inert. The amt. of raw sludge taken for use is 2% of the spent lye to be purified. After thorough mixing the lye is heated, then filtered and evapd. in vacuum. The spent lye must be slightly acidified before treatment.

Julian P. Smith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BURLAK, V.F., inzh.; CHERNUSHKO, Ye.P., inzh.

Andesite-basalt paste for protecting the brick lining of gas producers. Masl.-zhir. prom. 27 no.9:38-39 S '61. (MIRA 14:11)

1. Ussuriyskiy maslozhirovoy kombinat.
(Gas producers) (Protective coatings)

TUKHACHEVSKIY, Mikhail Nikolayevich[deceased]; OS'KIN, G.I., kand. ist. nauk, polkovnik; CHERNUSHKOV, P.P., kand. ist. nauk, polkovnik zapasa; SOLOV'YEV, N.I., red.

[Selected works] Izbrannye proizvedeniia [v dvukh tomakh]. Moskva, Voenizdat, 1964. 2 v. (MIRA 17:9)

KOROVYAKOVSKIY, I.G., inzh.; CHERNUSSKIY, A.I., inzh.; BARTALOG, A.F., inzh.; SHCHAVLINSKIY, V.A., inzh.; RYZHIK, V.M., inzh.

RLND-150 type separators with two reversible columns. Energ. i elektrotekh. prom. no.3:21-23 Jl-S '64.

(MIRA 17:11)

L 62090-65 EWT(1)

ACCESSION NR: AP5016738 UR/0286/65/000/010/0049/0049

AUTHORS: Nazarchuk, V. Ya.; Rokitskiy, Ye. I.; Chernyyavskiy, Yu. M. 14 B

TITLE: Device for automatically determining the Curie point of ferrites. Class 21, No. 171047 21

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 49

TOPIC TAGS: ferrite, Curie point

ABSTRACT: This Author Certificate presents a device for automatically determining the Curie point of ferrites. It contains an electric oven with an impeller for agitating the air and an electronic potentiometer to determine the [illegible] for several specimens simultaneously, the electric oven is provided with [illegible] ic rings (see Fig. 1 on the Enclosure). The [illegible] is to shield the [illegible] from heating by radiant energy. The specimens [illegible] in the form of [illegible] frequency transformers built into the holes of [illegible] and ceramic ring. [illegible] has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 10Aug63 ENCL: 01 SUB CODE: EC

NO REF SOV: 000 OTHER: 000

Card 1/2

L 62090-65

ACCESSION NR: AP5016738 ENCLOSURE: 01

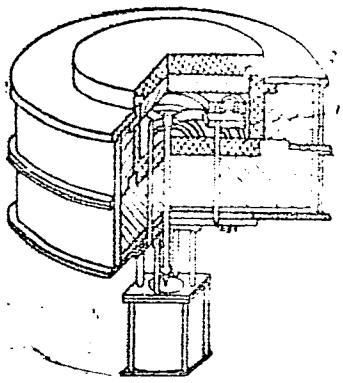


Fig. 1.

1- solid ceramic ring; 2- ceramic ring with holes

Card 2/2

ANDREYEV, A.S.; NOVIKOV, A.N.; CHERNY, F.

Determination of calcium and magnesium in nickel and nickel alloys. Trudy LPI no.201:46-50 '59. (MIRA 13:3)
(Calcium--Analysis) (Magnesium--Analysis)

BAYMAKOV, Yu.V.; KAMENETSKIY, M.V.; CHERNY, F.

Equilibrium between titanium chlorides and titanium metal in molten potassium and sodium chlorides. Izv.vys.ucheb.zav.; tsvet. met. 3 no.2:102-107 '60. (MIRA 15:4)

1. Leningradskiy politekhnicheskiy institut, kafedra elektropirometallurgii.
(Titanium--Electrometallurgy)

CHERNY, G. G. (Moscow)

"Hypersonic flow of inviscid gas past bodies".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964.

KNOR, Z.; PONETS, V.[Ponec, V.]; CHERNY, S.[Cerny, S.]

Interaction between hydrogen and oxygen on evaporated palladium films. Kin. i kat. 4 no.3:437-442 My-Je '63. (MIRA 16:7)

1. Institut fizicheskoy khimii AN Chekhoslovatskoy Sotsialisticheskoy Respubliki, Praga.
(Hydrogen) (Oxygen) (Palladium)

CHERNYA, N.D.

SOV-91-58-9-5/29

AUTHORS: Gleb, A.Ya. and Chernya, N.D., Engineers

TITLE: Centralizing the Control of Fuel Feeding Mechanisms (Tsentralizatsiya upravleniya mekhanizmami toplivopodachi)

PERIODICAL: Energetik, 1958, Nr 9, pp 12-15 (USSR)

ABSTRACT: The "Estenergo" Thermal Electric Plant's fuel feed system, used to transport fuel from the unloading bunkers along the conveyor belts to the boilers, was previously controlled manually and necessitated the presence of a large number of service personnel. In 1956, the plant began to centralize the control of the fuel transporting mechanisms. The authors describes the various methods by which this was achieved. By replacing and renewing some of the existing equipment, adopting a block lay-out and concentrating all the controls together on one central panel, the fuel feed was made almost completely automatic. The whole process could be controlled by 1-2 persons from the central switch board. There are 4 schematic diagrams, 1 diagram and 1 figure.

1. Fuels--Handling 2. Fuels--Control systems 3. Feed mechanisms --Effectiveness 4. Boilers--Equipment

Card 1/1

L 57534-65 EWT(d)/EWT(m)/EWP(i)/EWP(e)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(h) Pf-4/Peb JD

ACCESSION NR: AR5015175 UR/0137/65/000/005/D014/D014

SOURCE: Ref. zh. Metallurgiya, Abs. 5D88

AUTHOR: Martynov, V. D.; Ignatenko, N. N.; Shadchinev, V. A.; Cherepakhin, A. N.; Chernya, N. N.; Monakhov, V. N.

TITLE: Automatic ultrasonic production line for cleaning grease from rolled metal rods with a diameter from 10 to 70 mm

CITED SOURCE: Sb. Primeneniye ul'trazvuka v s.-kh. mashinostr. Rostov-na-Donu, Rostovsk. un-t, 1964, 109-120

TOPIC TAGS: ultrasonics, ultrasonic cleaning, cleaning, grease, metal rod

TRANSLATION: The article describes an experiment carried out in the Rostsel'mash plant on ultrasonic cleaning of grease from rolled rod. Several different methods of cleaning are presented and recommendations are given as to a choice of the most efficient cleaning methods applying chemical and ultrasonic means. A. Leont'yev.

SUB CODE: MM, IE ENCL: 00

Card 1/1 dm

TEPINKICHIYEV, V.K., prof., otv. red.; MARTYNOV, V.D., dots., red.; CHERNYA, N.N., st. inzh., red.; MONAKHOV, V.N., st. inzh., red.; SHADCHINEV, V.A., ispol. obyazan. dots., red.; BABIKOV, V.V., red.

[Use of ultrasonic waves in agricultural machinery manufacture] Primenenie ul'trazvuka v sel'skokhoziaistvennom mashinostroenii. Rostov-na-Donu, Izd-vo Rostovskogo univ., 1964. 157 p. (MIRA 18:3)

1. Rostov-on-Don. Institut sel'skokhozyaystvennogo mashinostroyeniya.

ZEDGENIDZE, G.A.; CHERKASOV, V.F.; FILATOV, P.P.; YELASHOV, Yu.G.; CHERNYACHOVSKAYA, A.K.; SAYENKO, S.F.

Scientific research on radiobiology, clinical radiology and roentgenology conducted in the institutes of the Academy of Medical Sciences of the U.S.S.R. in 1964. Vest. AMN SSSR 20 no.9:3-10 '65. (MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

CHERNYADEV, A.

Automatic grain cleaning and drying unit. Tekh.v sel'khoz. 21 no.8:23-28 Ag '61. (MIRA 14:7)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Grain—Cleaning) (Grain—Drying)

CHERNYADEV, A., Eng.

Steam

Using exhaust from steam engines in raising livestock. Kolkh. proizv. No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

CHERNYADEV, A. N.

N/5
735.921
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Teplofikatsiya kolkhozov (Generation of electricity at the central heating plant of kolkhozes) Kirov, KirovskoyeKnizhnoye Izd-vo, 1954.
98p. diagrs., tables.
"Literatura": p. (100)

CHERNYADEV, A., inzhener.

Farm heating plant without distributing mains. Sel'.stroi.11 no.5:19-20 My '56. (MLRA 9:9)

1.Kirovskiy filial Severo-zapafdnogo proyektnogo instituta. (Waste heat) (Feeding and feeding stuffs)

Chernyadev, Adrian Nikolayevich

CHERNYADEV, Adrian Nikolayevich; LETNEV, B.Ya., red.; SOKOLOVA, N.N.,tekhn.red.

[Generation of electricity at central heating plants for agricultural uses] Opyt teplofikatsii sel'skogo khoziaistva. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1957. 183 p. (MIRA 11:1)
(Electric power plants) (Heating from central stations)